



Overview

Synonyms IL-1F11, NF-HEV

> Interleukin-33 (IL-33) is a proinflammatory cytokine that belongs to the IL-1 family. IL-33 is expressed in a variety of cells, including epithelial and endothelial cells, smooth muscle cells, macrophages and fibroblasts. The primary receptors for IL-33 are ST2 and IL-1 receptor accessory protein (IL-1RAcP), both of which belong to the IL-1 receptor family. IL-33 is localized to the nucleus of resting cells where it binds to chromatin in the H2A-H2B histone complex as a transcriptional suppressor. IL-33 is secreted by cells during injury which induces a T-helper 2 type inflammatory response. Evidence suggests IL-33

Description plays a role in autoimmune disease. IL-33's interaction with ST2 can drive allergic

pathology and IL-33 has been reported to play a role in the development of rheumatoid

arthritis and systemic lupus erythematosus.

Recombinant humanInterleukin-33 (rhIL-33) produced in E. coli is a single nonglycosylated polypeptide chain containing 159 amino acids. A fully biologically active molecule, rhIL-33 has a molecular mass of 18.0 kDa analyzed by reducing SDS-PAGE

and is obtained by proprietary chromatographic techniques.

Accession No O95760 **Species** Human

Source E. coli

ED₅₀ <0.5ng/mL, measured by a cell proliferation assay using D10S cells, corresponding **Biological Activity**

to a specific activity of > 2x 106 units/mg.

SITGISPITE YLASLSTYND QSITFALEDE SYEIYVEDLK KDEKKDKVLL SYYESQHPSN ESGDGVDGKM LMVTLSPTKD Sequence FWLHANNKEH SVELHKCEKP LPDQAFFVLH NMHSNCVSFE

CKTDPGVFIG VKDNHLALIK VDSSENLCTE NILFKLSET

Properties

Measured Molecular 18.0 kDa, observed by reducing SDS-PAGE.

Weight

> 95% by SDS-PAGEanalysis. Purity

Formulation Lyophilized after extensive dialysis against PBS. Reconstitution Reconstituted in ddH₂O at 100 μg/mL.

Endotoxin Level < 0.2 EU/µg, determined by LAL method.

> Lyophilized recombinant human Interleukin-33 (rhlL-33) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIL-33 remains stable up to

Storage

2 weeks at 4°C or up to 3 months at -20°C.

Note For research use only

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